SITE DEVELOPMENT PLAN 67 CHACE ROAD FREETOWN, MASSACHUSETTS

APPLICANT:

ALAN ALVES

TJA CLEAN ENERGY, LLC. 150 John Vertente blvd.

NEW BEDFORD, MA 02745

OWNER: CHIPAWAY CORPORATION

P.O. BOX 519
E. WAREHAM, MA 02538

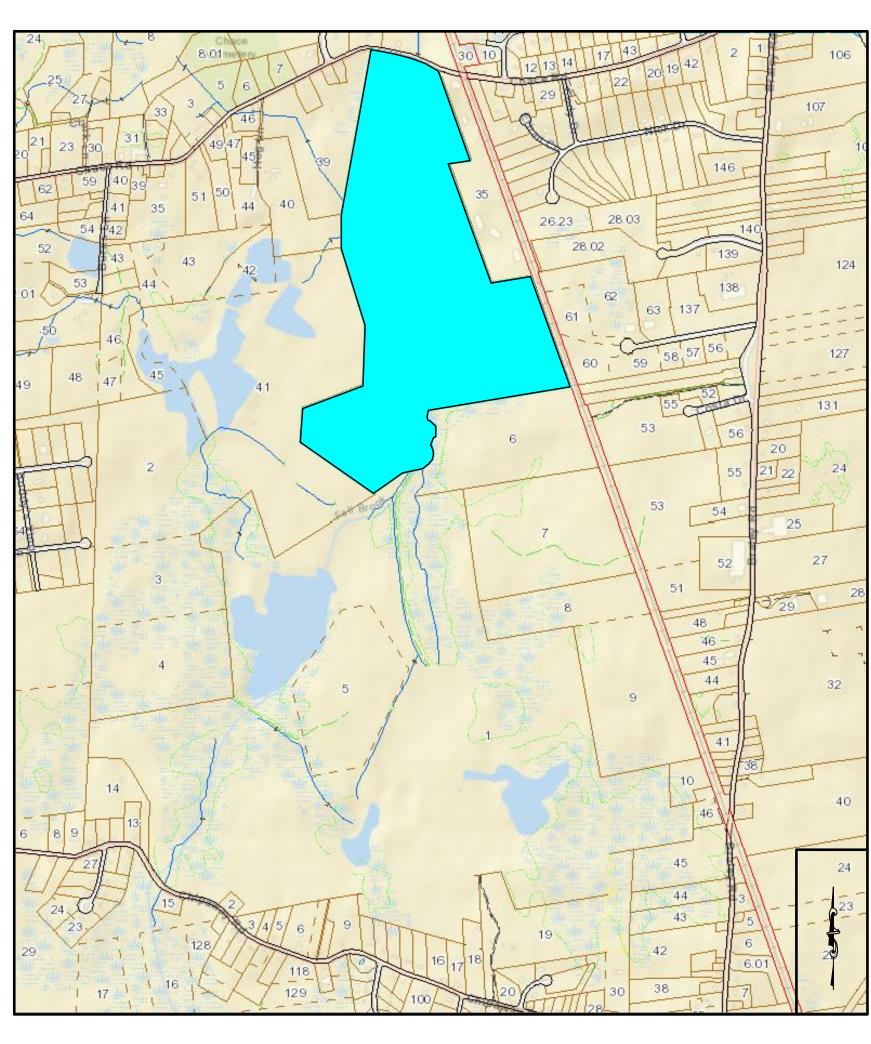
ENGINEER/SURVEYOR:

E. T. ENGINEERING ENTERPRISES, INC. CVIL ENGINEERS & CONSTRUCTION MANAGERS

481 BEDFORD STREET (RTES. 18 & 28)
BRIDGEWATER, MA 02324-3152
PHONE: (508)-697-5215 FAX: (508)-697-1451
WWW.ETENGINEERING.COM

TOWN OF FREETOWN PLANNING BOARD SITE PLAN APPROVAL

DATE:



LOCUS PLAN
SCALE: 1" = 1000'

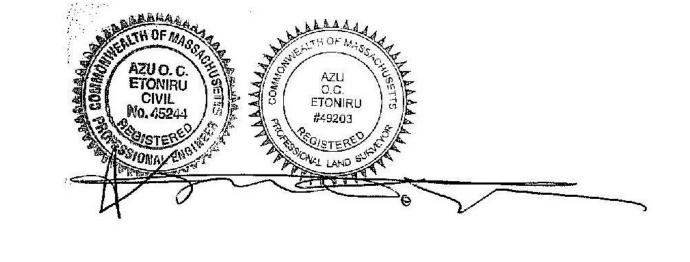
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(ASSESSORS MAP 241 LOT 36)

FREETOWN, MASSACHUSETTS (BRISTOL COUNTY)

DATE: OCTOBER 23, 2020 REV: FEBUARY 23, 2021 REV: FEBUARY 2, 2022

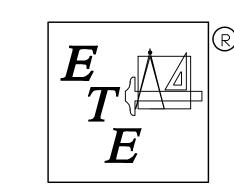


AZU O. C. ETONIRU, P.E., P.L.S.

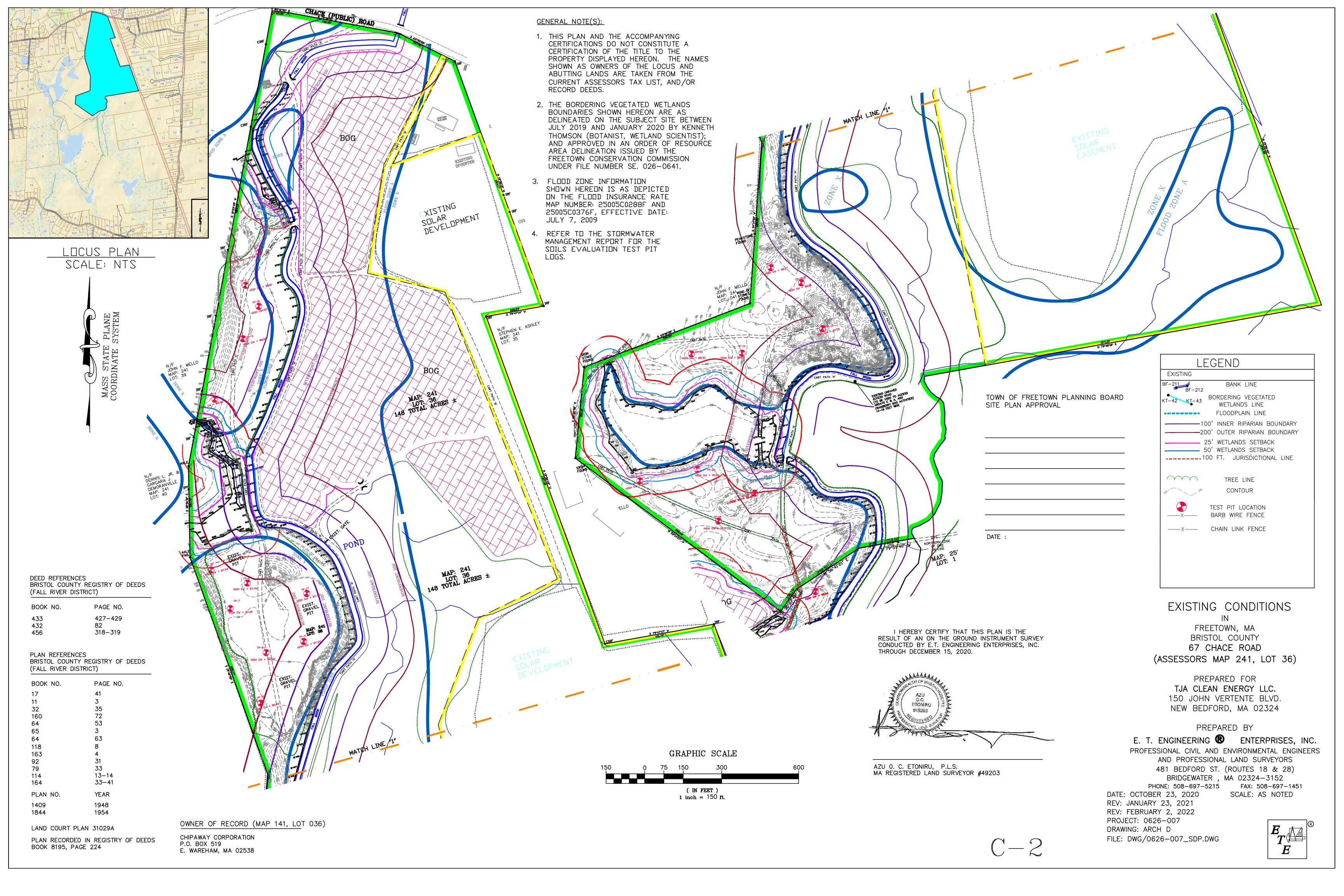
MA REGISTERED PROFESSIONAL ENGINEER #45244

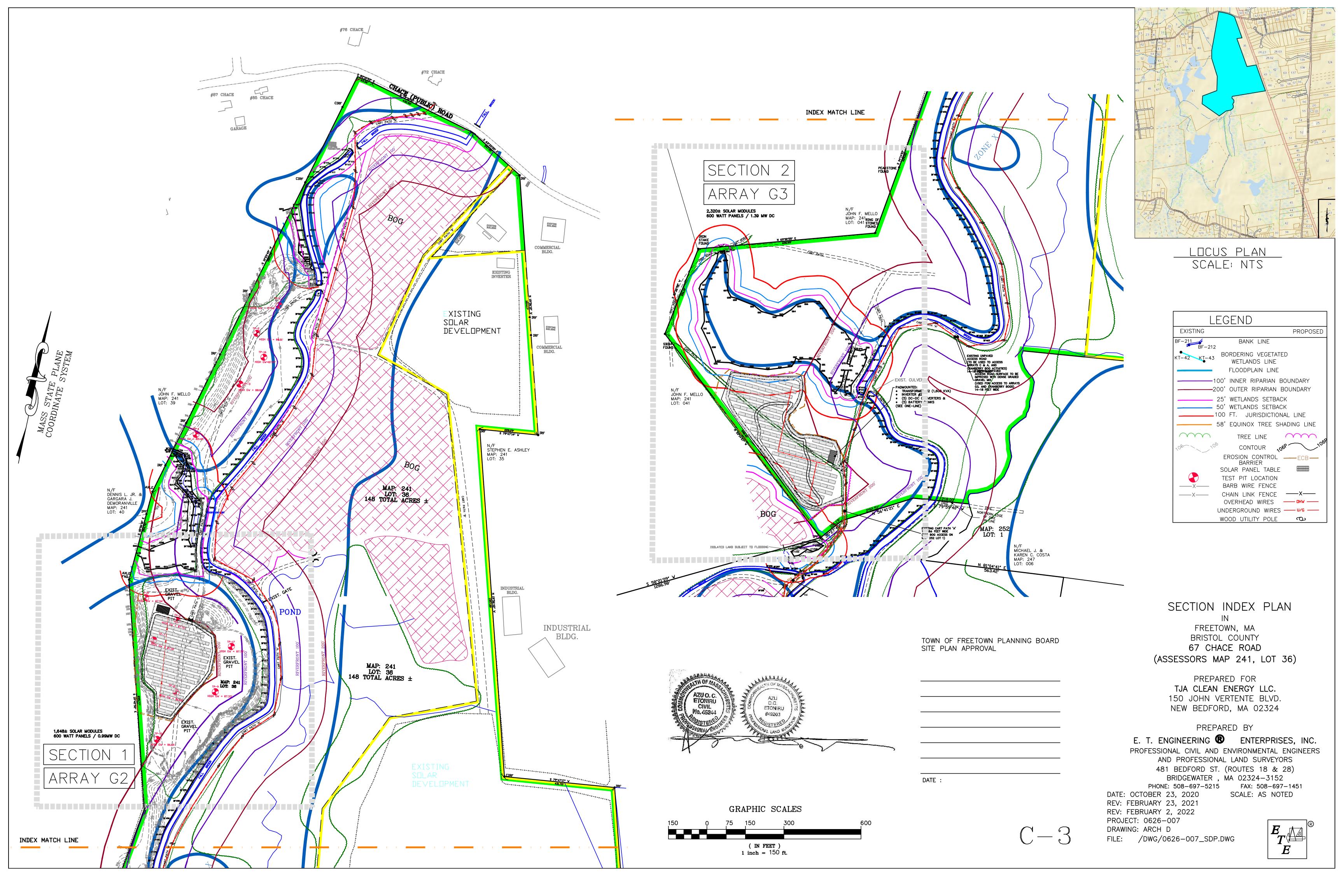
MA REGISTERED PROFESSIONAL LAND SURVEYOR #49203

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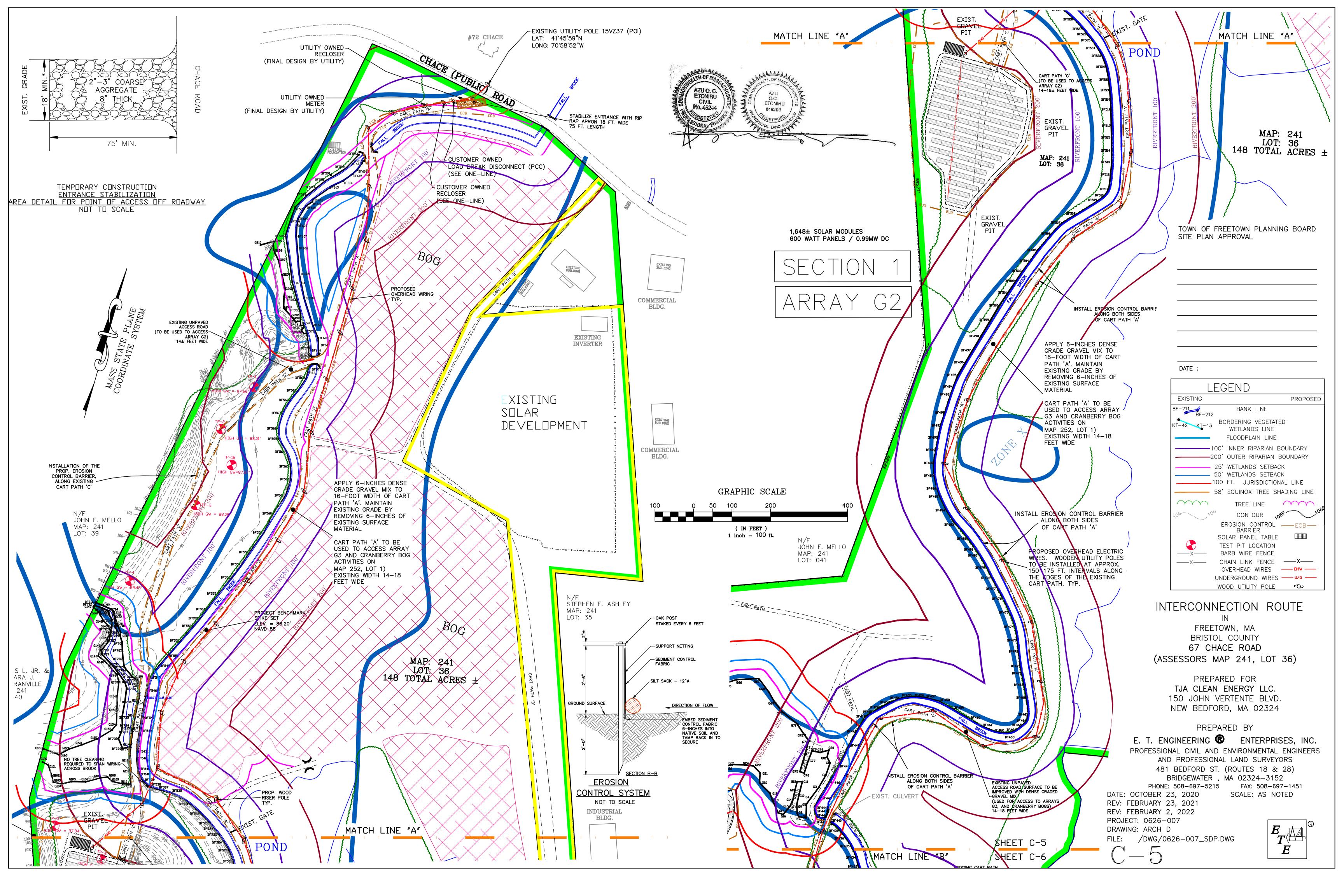


FILE: 0626-007 DRAWING COVER





LEGEND DESIGN & CONSTRUCTION NOTES **EXISTING** PROPOSED CONTRACTOR SHALL NOTIFY DIG-SAFE AND THE TOWN OF STAKED EVERY 6 FEET FREETOWN WATER AND HIGHWAY DEPARTMENTS PRIOR TO BANK LINE COMMENCING ANY EXCAVATION WORK IN ORDER TO VERIFY THE KT-42 KT-43 BORDERING VEGETATED LOCATIONS OF EXISTING UNDERGROUND UTILITIES. THE **ETONIRU** CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO WETLANDS LINE #49203 -SUPPORT NETTING ANY PRIVATE OR PUBLIC UNDERGROUND UTILITY WHICH MAY FLOODPLAIN LINE RESULT FROM HIS/HER WORK. SEDIMENT CONTROL — 100' INNER RIPARIAN BOUNDARY 2. THE UTILITY POLES AND OVERHEAD ELECTRIC WIRES SHOWN -200' OUTER RIPARIAN BOUNDARY HEREON ARE SHOWN FOR ILLUSTARTIVE PURPOSES ONLY. A SILT SACK - 12"ø QUALIFIED DESIGNER FAMILIAR WITH UTILITY POLE 25' WETLANDS SETBACK INSTALLATIONS SHALL PREPARE THE DESIGN FOR THE FINAL - 50' WETLANDS SETBACK LOCATION AND DIMENSIONS OF THE UTILITY POLES ALONG THE __100 FT. JURISDICTIONAL LINE INTERCONNECTION ROUTE. DIRECTION OF FLOW 58' EQUINOX TREE SHADING LINE 3. A SIGN INDICATING THE SITE OWNER'S NAME AND 24-HOUR EMBED SEDIMENT CONTROL FABRIC 6-INCHES INTO NATIVE SOIL AND TAMP BACK IN TO SECURE $\bigcirc \bigcirc \bigcirc \bigcirc$ TREE LINE EMERGENCY CONTACT TELEPHONE NUMBER SHALL BE PLACED NO TREE CLEARING UPON ALL ACCESS GATES AT EACH PROPOSED PANEL ARRAY. CONTOUR REQUIRED TO SPAN WIRING EROSION CONTROL ——FCB— 4. ALL BUILDINGS AND FIXTURES SHALL BE CONSTRUCTED IN TRANSFORMER #1 (2,750 KVA) W/ SIGNAGE ACROSS BROOK ACCORDANCE WITH THE STATE BUILDING CODE. A BUILDING PERMIT INVERTER #1 EMERGENCY CONTAC SOLAR PANEL TABLE SHALL BE OBTAINED BEFORE ANY CONSTRUCTION COMMENCES. TEST PIT LOCATION (5) DC-DC CONVERTERS & BOULDERS ARE NOT EXPECTED TO BE ENCOUNTERED WITHIN ARRAY BARB WIRE FENCE 'G2'. IF BOULDERS ARE ENCOUNTERED DURING THE EXCAVATION (5) BATTERY BANKS SECTION B-B CHAIN LINK FENCE ——X—— AND / OR DURING GENERAL GRADING FOR SITE DEVELOPMENT, THEY **EROSION** OVERHEAD WIRES SHALL NOT BE LOCATED AT LOCATIONS WHICH MAY PRESENT (SEE ONE-LINE) CONTROL SYSTEM UNDERGROUND WIRES ---- U/G ----NEGATIVE VISUAL EFFECTS TO ABUTTING PROPERTIES. BOULDERS ENCOUNTERED IN ARRAY 'G2' MAY BE LINED ALONG THE FINISHED NOT TO SCALE WOOD UTILITY POLE GRADES OF THE SOUTHERN AND EASTERN EDGES OF THE ARRAY. BOULDER STACKING MAY NOT EXCEED 3 FEET AND ALL BOULDERS PROJECT BENCHMARK PLACED MUST BE IN A STABLE POSITION. THE CONTRACTOR MAY ALSO CHOOSE TO DISPOSE OF THE BOULDERS AT AN APPROVED SPIKE SET OFFSITE LOCATION. ELEV. = 99.56'CONSTRUCTION CONTROL AND NAVD 88 **SEQUENCE:** TOWN OF FREETOWN PLANNING BOARD MATCH LINE SITE PLAN APPROVAL THE PERIMETER EROSION CONTROL BARRIERS AS SHOWN HEREON DELINEATE THE LIMIT OF WORK AND SHALL BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE TOWN'S AGENT AND THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. 2.) FOLLOWING TREE CUTTING ALONG THE WESTERN EDGE OF THE CONSTRUCT A 10-FOOT WIDE AND 6-INCH HIGH ARRAY, THE PROPOSED STORMWATER INFILTRATION AREAS AND ASSOCIATED PERIMETER ACCESS ROAD SHALL BE EXCAVATED AND GRAVEL MAINTENANCE ROAD WITH A TOP PREPARED TO COLLECT AND DETAIN CONSTRUCTION PERIOD GENERATED SEDIMENTS. ELEVATION OF 91.6 FEET 102 AROUND THE ARRAY AS SHOWN CART PATH 'C' 3.) ANY AREAS DESIGNATED AS TEMPORARY STOCKPILE AREAS SHALL BE PREPARED AND DEFINED WITH EROSION CONTROL BARRIERS ALONG (TO BE USED TO A THEIR RESPECTIVE OUTSIDE EDGES. THESE AREAS SHALL BE UTILIZED FOR STOCKPILING OF EXCAVATED MATERIAL, FILL MATERIAL, AND LOAM ARRAY G2) TREE SHADING PILES, IF ANY. 14-16± FEET WIDE ON EQUINOX 6.) UPON COMPLETION OF WORK, DISTURBED GROUND SHALL BE STABILIZED WITH 6 INCHES OF LOAM AND GRASS SEED PLANTING. INSTALL EROSION CONTROL BARRIER AND CUT TREES DATE: TALLER THAN 25' TO PROPERTY LINE (STUMPS AND 7.) THROUGHOUT THE DEVELOPMENT WORK, THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL BARRIERS AT THE BEGINNING AND END UNDERBRUSH TO REMAIN IN PLACE) OF THE WORK DAY TO ENSURE PROPER FUNCTIONING. THE CONTRACTOR SHALL REPAIR/REPLACE ANY DAMAGED PORTION OF THE EROSION INSTALL PROPOSED 7' TALL CHAIN LINK CONTROL BARRIER BEFORE STARTING/RESUMING CONSTRUCTION. THE 6-INCHES LOAM ALL AREAS SECURITY FENCE AS SHOWN EROSION CONTROL BARRIERS SHALL REMAIN IN PLACE UNTIL ALL & SEEDED DISTURBED BY GRAVEL DISTURBED SURFACES HAVE BEEN SATISFACTORILY STABILIZED AND SLOPES 0-3% (BOTTOM OF FENCE 6-INCH MINIMUM PROJECT ACTIVITY UNTIL THE FREETOWN CONSERVATION COMMISSION HAS ISSUED A PIT TO BE RESTORED CERTIFICATE OF COMPLIANCE. THE CONSERVATION COMMISSION AND ITS ABOVE GROUND) WITH LOAM AND INSPECTOR, ALONG WITH THE DESIGN ENGINEER SHALL CONDUCT TYP. PERIODIC INSPECTION OF THE EROSION CONTROL BARRIERS TO MONITOR GRASS SEED. AND ENSURE THAT THE BARRIERS ARE BEING MAINTAINED IN GOOD WORKING CONDITION, AS WELL AS GROUND STABILIZATION MONITORING ALL AREAS OF DISTURBANCE DISTURBED SANDY THE CONTRACTOR SHALL REPAIR ANY DAMAGED EROSION CONTROL WITHIN THE LIMITS OF THE BARRIERS AND INSTITUTE ADDITIONAL GROUND STABILIZATION MEASURES SUBGRADE MAP: 241 AS DIRECTED BY THE DESIGN ENGINEER AND/OR THE CONSERVATION PERIMETER ACCESS ROAD COMMISSION AND/OR THE COMMISSION'S AGENT/INSPECTOR. RESTORATION DETAIL TP-9 LOT: 36 SHALL RECEIVE 6-INCHES OF NOT TO SCALE LOAM TOP SOIL AND AN APPLICATON OF KENTUCKY BLUEGRASS OR OTHER APPROVED COOL-SEASON TOLERANT GRASS SEED. ELECTRICAL COM GRASS SEEDING SHALL BE PROPOSED GRADING, DRAINAGE, WATERED AND MONITORED FOR AND UTILITIES PLAN ARRAY G2 PROPER GROWTH AND GRAVEL GRAVEL DEVELOPMENT. PERIMETER ROAD PERIMETER ROAD FREETOWN, MA TOP EL. = 91.6TOP EL. = 91.6BRISTOL COUNTY 100 YEAR EVENT EL. = 90.52 67 CHACE ROAD LEVEL BOTTOM @ (ASSESSORS MAP 241, LOT 36) EL. 90.5 1,648± SOLAR MODULES 6-INCHES LOAM 600 WATT PANELS / 0.99MW DC AND SEED PREPARED FOR EXISTING SANDY SUBGRADE TJA CLEAN ENERGY LLC. 150 JOHN VERTENTE BLVD. NEW BEDFORD, MA 02324 G2 INFILTRATION AREA DETAIL NOT TO SCALE PREPARED BY E. T. ENGINEERING ® ENTERPRISES, INC. EROSION CONTROL BARBIER AND PERIMETER FENCE PROFESSIONAL CIVIL AND ENVIRONMENTAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS 481 BEDFORD ST. (ROUTES 18 & 28) TO BE INSTALLED OUTSIDE BRIDGEWATER, MA 02324-3152 OF THE 200' RIPARIAN BOUNDARY GRAPHIC SCALE PHONE: 508-697-5215 FAX: 508-697-1451 AND SHALL BE THE LIMIT OF WORK SCALE: AS NOTED DATE: OCTOBER 23, 2020 REV: FEBRUARY 23, 2021 REV: FEBRUARY 2, 2022 PROJECT: 0626-007 (IN FEET) 1 inch = 50 ft. DRAWING: ARCH D /DWG/0626-007_SITE.DWG



DESIGN & CONSTRUCTION NOTES

- 1. CONTRACTOR SHALL NOTIFY DIG-SAFE AND THE TOWN OF FREETOWN WATER AND HIGHWAY DEPARTMENTS PRIOR TO COMMENCING ANY EXCAVATION WORK IN ORDER TO VERIFY THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY PRIVATE OR PUBLIC UNDERGROUND UTILITY WHICH MAY RESULT FROM HIS/HER WORK.
- 2. THE UTILITY POLES AND OVERHEAD ELECTRIC WIRES SHOWN HEREON ARE SHOWN FOR ILLUSTARTIVE PURPOSES ONLY. A QUALIFIED DESIGNER FAMILIAR WITH UTILITY POLE INSTALLATIONS SHALL PREPARE THE DESIGN FOR THE FINAL LOCATION AND DIMENSIONS OF THE UTILITY POLES ALONG THE INTERCONNECTION ROUTE.
- 3. A SIGN INDICATING THE SITE OWNER'S NAME AND 24-HOUR EMERGENCY CONTACT TELEPHONE NUMBER SHALL BE PLACED UPON ALL ACCESS GATES AT EACH PROPOSED PANEL ARRAY.
- 4. ALL BUILDINGS AND FIXTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STATE BUILDING CODE. A BUILDING PERMIT SHALL BE OBTAINED BEFORE ANY CONSTRUCTION COMMENCES.
- 5. BOULDERS ARE NOT EXPECTED TO BE ENCOUNTERED WITHIN ARRAY 'G3'. IF BOULDERS ARE ENCOUNTERED DURING THE EXCAVATION AND/OR DURING GENERAL GRADING FOR SITE DEVELOPMENT, THEY SHALL NOT BE LOCATED AT LOCATIONS WHICH MAY PRESENT NEGATIVE VISUAL EFFECTS TO ABUTTING PROPERTIES. BOULDERS ENCOUNTERED IN ARRAY 'G3' MAY BE LINED ALONG THE FINISHED GRADES OF THE SOUTHERN EDGES OF THE ARRAY. BOULDER STACKING MAY NOT EXCEED 3 FEET AND ALL BOULDERS PLACED MUST BE IN A STABLE POSITION. THE CONTRACTOR MAY ALSO CHOOSE TO DISPOSE OF THE BOULDERS AT AN APPROVED OFFSITE

CONSTRUCTION CONTROL AND SEQUENCE:

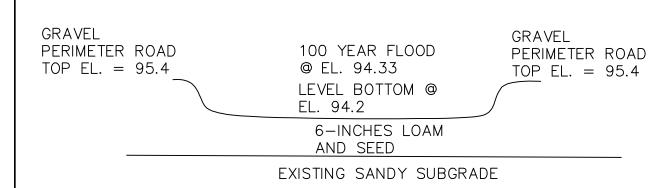
1) THE PERIMETER EROSION CONTROL BARRIERS AS SHOWN HEREON DELINEATE THE LIMIT OF WORK AND SHALL BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE TOWN'S AGENT AND THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION.

2.) FOLLOWING TREE CLEARING AND GRUBBING, THE PROPOSED STORMWATER INFILTRATION AREAS AND PERIMETER GRAVEL ROADS SHALL BE EXCAVATED AND PREPARED AS A CONSTRUCTION PERIOD SEDIMENT BASIN.

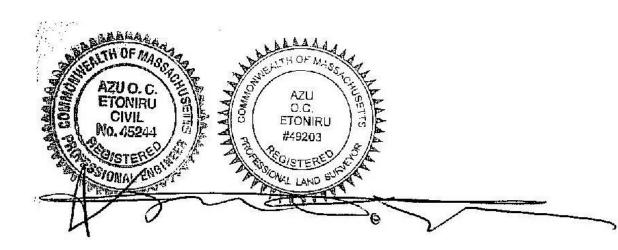
3.) ANY AREAS DESIGNATED AS TEMPORARY STOCKPILE AREAS SHALL BE PREPARED AND DEFINED WITH EROSION CONTROL BARRIERS ALONG THEIR RESPECTIVE OUTSIDE EDGES. THESE AREAS SHALL BE UTILIZED FOR STOCKPILING OF EXCAVATED MATERIAL, FILL MATERIAL, AND LOAM PILES.

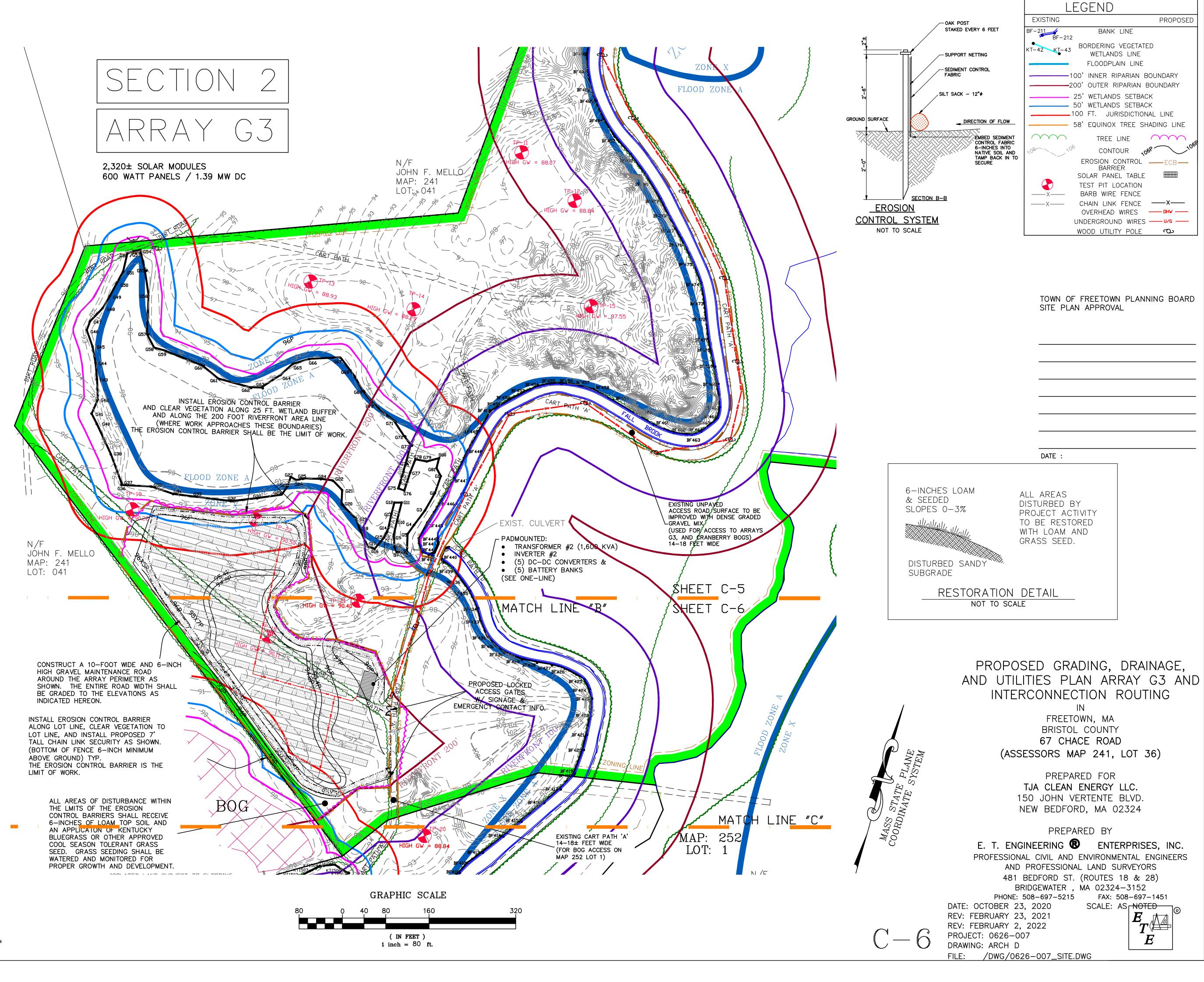
6.) UPON COMPLETION OF WORK, DISTURBED GROUND SHALL BE STABILIZED WITH 6 INCHES OF LOAM AND KENTUCKY BLUEGRASS OR APPROVED EQUAL GRASS SEED PLANTING.

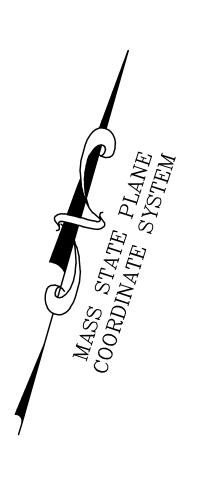
7.) THROUGHOUT THE DEVELOPMENT WORK, THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL BARRIERS AT THE BEGINNING AND END OF THE WORK DAY TO ENSURE PROPER FUNCTIONING. THE CONTRACTOR SHALL REPAIR/REPLACE ANY DAMAGED PORTION OF THE EROSION CONTROL BARRIER BEFORE STARTING/RESUMING CONSTRUCTION. THE EROSION CONTROL BARRIERS SHALL REMAIN IN PLACE UNTIL ALL DISTURBED SURFACES HAVE BEEN SATISFACTORILY STABILIZED AND UNTIL THE FREETOWN CONSERVATION COMMISSION HAS ISSUED A CERTIFICATE OF COMPLIANCE. THE CONSERVATION COMMISSION AND ITS INSPECTOR, ALONG WITH THE DESIGN ENGINEER SHALL CONDUCT PERIODIC INSPECTION OF THE EROSION CONTROL BARRIERS TO MONITOR AND ENSURE THAT THE BARRIERS ARE BEING MAINTAINED IN GOOD WORKING CONDITION. AS WELL AS GROUND STABILIZATION MONITORING. THE CONTRACTOR SHALL REPAIR ANY DAMAGED EROSION CONTROL BARRIERS AND INSTITUTE ADDITIONAL GROUND STABILIZATION MEASURES AS DIRECTED BY THE DESIGN ENGINEER AND/OR THE CONSERVATION COMMISSION AND/OR THE COMMISSION'S AGENT/INSPECTOR.

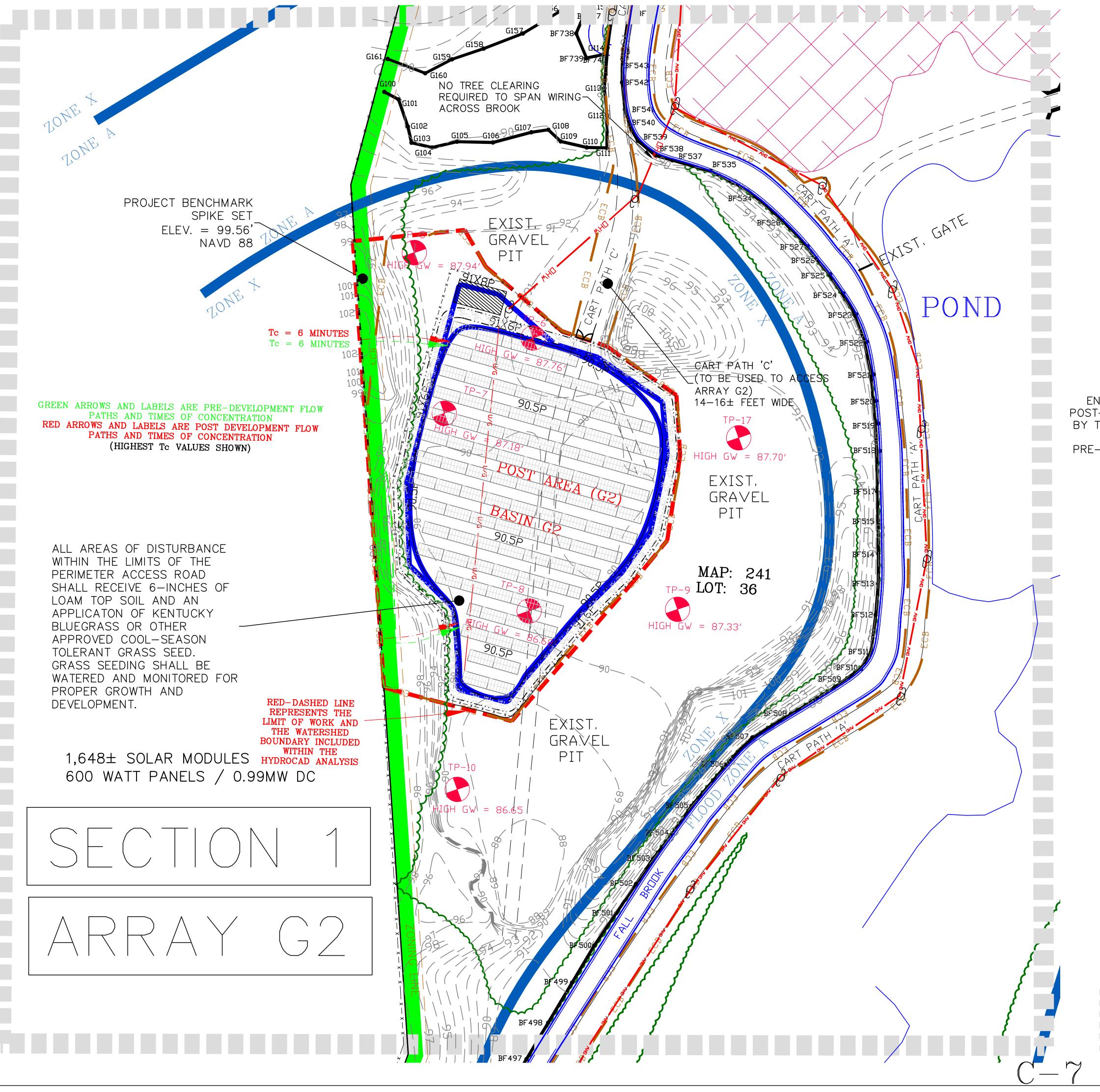


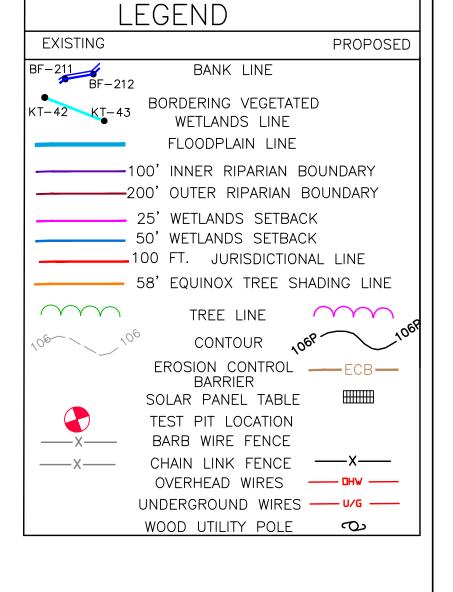
G3 INFILTRATION AREA DETAIL
NOT TO SCALE











THE AREA WITHIN THE PRE-DEVELOPMENT
SUBCATCHMENT FOR EACH PANEL ARRAY
ENCOMPASSES THE ENTIRETY OF THE COMBINED
POST-DEVELOPMENT SUBCATCHMENTS AS DELINEATED
BY THE DASHED RED LINES AROUND THE PERIMETER
OF EACH ARRAY. THEREFORE, THE
PRE-DEVELOPMENT AND POST-DEVELOPMENT AREAS
BEING COMPARED ARE IDENTICALLY SIZED.

TOWN OF FREETOWN PLANNING BOARD SITE PLAN APPROVAL

DATE:

DA

WATERSHED PLAN AREA G2
IN
FREETOWN, MA
BRISTOL COUNTY
67 CHACE ROAD
(ASSESSORS MAP 241, LOT 36)

PREPARED FOR

TJA CLEAN ENERGY LLC.

150 JOHN VERTENTE BLVD.

NEW BEDFORD, MA 02324

PREPARED BY

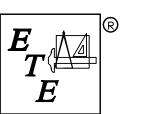
E. T. ENGINEERING ® ENTERPRISES, INC.

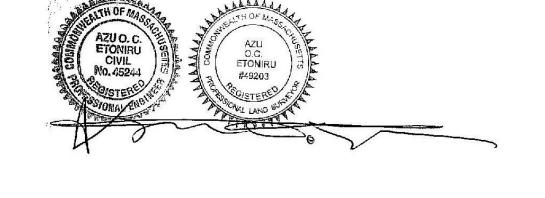
PROFESSIONAL CIVIL AND ENVIRONMENTAL ENGINEERS
AND PROFESSIONAL LAND SURVEYORS
481 BEDFORD ST. (ROUTES 18 & 28)
BRIDGEWATER, MA 02324-3152

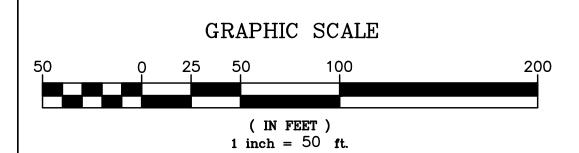
PHONE: 508–697–5215 FAX: 508–697–1451
DATE: OCTOBER 23, 2020 SCALE: AS NOTED
REV FEBRUARY 23, 2021

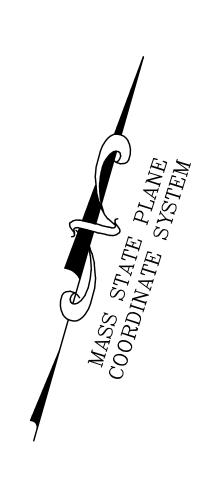
REV FEBRUARY 23, 2021
REV: FEBRUARY 2, 2022
PROJECT: 0626-007
DRAWING: ARCH D

FILE: /DWG/0626-007_SITE.DWG



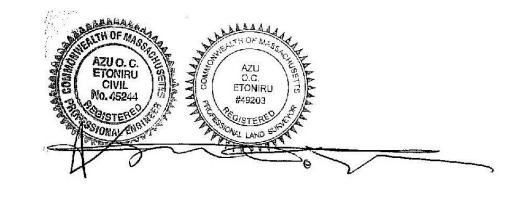


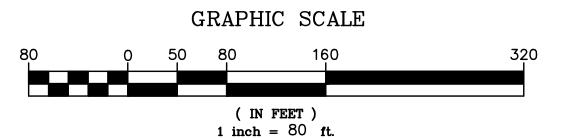


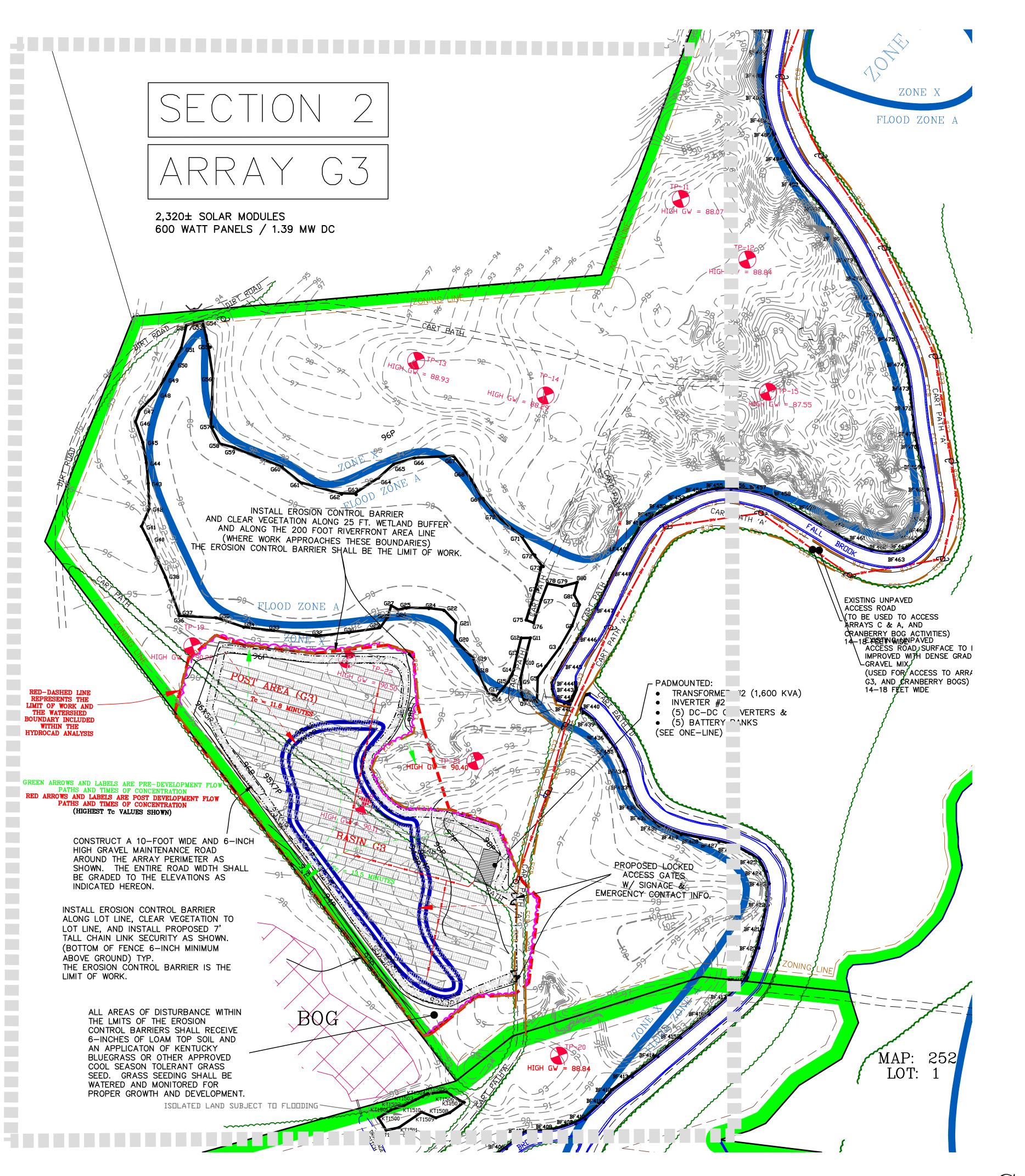


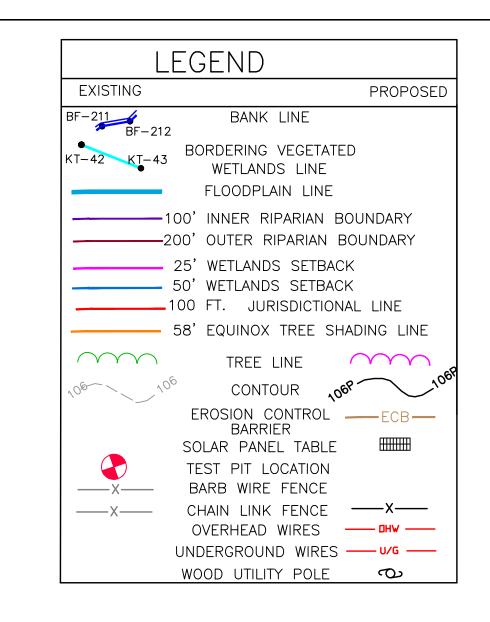
NOTE:

THE AREA WITHIN THE PRE-DEVELOPMENT
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TOWN OF FREETOWN PLANNING BOARD SITE PLAN APPROVAL

WATERSHED PLAN AREA G3
IN
FREETOWN, MA

BRISTOL COUNTY
67 CHACE ROAD
(ASSESSORS MAP 241, LOT 36)

PREPARED FOR

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DRAWING: ARCH D
FILE: /DWG/0626-007_SITE.DWG

SCALE: AS NOTED